

ABSTRACT

An oxide superconductor current lead in which generation of Joule heat at joint portions with a system side conductor and a power supply side conductor is reduced with use of an oxide superconductor with less heat penetration into a super conducting equipment system is provided. A columnar oxide superconductor molten bodies (interelectrode superconductor 260, in-electrode superconductors 280a and 280b) are produced, the in-electrode superconductor 280a and a left end portion of the interelectrode superconductor 260 are placed into a power supply side metallic electrode 210, and the in-electrode superconductor 280b and a right end portion of the interelectrode superconductor 260 are similarly placed in a system side metallic electrode 211, then degassed joining metal is used to join them to form an oxide superconductor current lead 201, a power supply side conductor 5 from a power supply is joined to the power supply side metallic electrode 210, and a system side conductor 202 from a superconducting system side is joined to the system side metallic electrode 211 with use of respective clamps 203a and 203b.